REMARKS/ARGUMENTS

Claims 1, 5 – 7, 9 – 15, 20, 22, 23, 25, 28, and 29 were previously pending. Claims 1, 20, and 28 have been amended. No claims have been added or canceled. Thus, claims 1, 5 – 7, 9 – 15, 20, 22, 23, 25, 28, and 29 remain pending.

In view of the foregoing amendments and the following remarks, Applicants respectfully submit that all pending claims are in condition for allowance.

Claim Rejections – 35 USC § 103

Claims 1, 5, 6, 20, 22, and 28 are rejected under 35 USC § 103(a) as being obvious over Madour (US Patent Application Publication No. 2003/0053431, "Madour I") in view of Bertrand (US Patent No. 6,876,640). Claims 7, 9 – 15, 23, 25, and 29 are rejected under 35 USC § 103(a) as being obvious over Bertrand in view of Madour (US Patent No. 6,834,050, "Madour II"). Applicants respectfully traverse these rejections.

<u>Independent Claims 1, 20, and 28</u>

Claim 1 recites, among other things, a wireless communication device, comprising a connection table for storing one or more connection identifiers, wherein a connection identifier corresponds to a Packet Coordination Function (PCF) that has been previously visited by the wireless communication deice, the connection table indicating whether a connection between the wireless communication device and each PCF is active; a processor for determining if a received connection identifier is contained in the connection table, and for delivering the received connection identifier to the connection table for storing when the received connection identifier is not contained in the connection table; and a first inactivity timer associated with the connection identifier, wherein the processor removes the connection identifier from the connection table in response to an expiration of the first inactivity timer, the first inactivity timer configured to expire before a second inactivity timer maintained in a PDSN to which the wireless communication device is connected via the PCF and which is also associated with the connection identifier. Thus, the wireless communication device itself maintains a timer used to determine whether to remove an entry from its connection table, the entries corresponding to previously visited PCFS, and the PDSN also maintains a similar timer. The timer maintained by the wireless device is configured to expire before the timer maintained by the PDSN. Independent

claims 20 and 28 include similar features. At least this combination of features is not disclosed or even suggested by Madour I or Bertrand, alone or in combination with each other.

In the Final Office Action, the Examiner correctly acknowledged that Madour I fails to disclose "a corresponding timer, wherein the processor removes a connection from the connection table in response to an expiration of the corresponding timer; and wherein the processor resets the corresponding timer in response to activity on a connection corresponding to the connection identifier." In the Advisory Action, the Examiner now appears to indicate that Madour I discloses a timer in terminal 205, but does not disclose that the processor removes a connection from the connection table in response to an expiration of the corresponding timer; and wherein the processor resets the corresponding timer in response to activity on a connection corresponding to the connection identifier. The Examiner relies on Bertrand to overcome the deficiencies of Madour I.

Madour I is concerned with intra-PDSN handoffs. That is, Madour I deals with handoffs from one PCF to another, both PCFs communicating with the same PDSN. The Examiner asserts that Madour I discloses "a timer in terminal 205 because the terminal stores and updates PZID lists (see [0034]); and the terminal also deletes older PZID previously stored with first in first out procedure (see [0037])." From this, the Examiner concludes that "it is clear that terminal 205, which is being associated with the 'wireless communication device,' must have a timer to be able to perform the above procedure."

It appears that the Examiner is arguing that this is an inherent feature. However, for a feature to be inherent, the feature must necessarily be present in the reference. See, MPEP § 2112. "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original).

The Examiner has failed to provide any factual basis or technical reasoning to prove that a timer is necessarily present in the terminal 205 of Madour I. The mere fact that older PZID entries are removed via a first in first out procedure does not require a timer. For example, a simple ordering of the entries can keep track of which entries should be added or deleted based on a first in, first out procedure. Further, for example, a simple timestamp indicating when an entry was included in the table can be used to determine the oldest (first in) PZID entry. The

ordering or timestamp procedures would not be a timer which can expire, as argued by the Examiner. Thus, based on lack of any factual disclosure, Madour I fails to teach or suggest a timer in terminal 205 and certainly does not disclose an inactivity timer as recited in the amended claims. Madour I also fails to disclose a second inactivity timer maintained in a PDSN, wherein the first inactivity timer is configured to expire before the second inactivity timer.

Bertrand also fails to disclose a first inactivity timer associated with the connection identifier, wherein the processor removes the connection identifier from the connection table in response to an expiration of the first inactivity timer, the first inactivity timer configured to expire before a second inactivity timer maintained in a PDSN to which the wireless communication device is connected via the PCF and which is also associated with the connection identifier. Bertrand, in contrast to Madour I, is concerned with inter-PDSN handoffs. That is, Bertrand deals with handoffs from one PDSN to a different PDSN. Bertrand does not disclose or even suggest <u>a wireless communication device which maintains a timer</u> used to determine whether a connection identifier should be removed from a connection table (the connection table also included on the wireless device). Rather, as previously explained, it is only the PPP registers 126 in Bertrand that maintain a timer. As described in column 8, line 60 – column 9, line 5, R-P connections (e.g., the connection between an RN 108 and a PDSN 120) must be periodically re-registered. When an RN 108 sends a re-registration message to a PDSN 120, the PDSN 120 refreshes a PPP register 126 so that the PPP register does not timeout. The PPP register then updates its expiration timer. If a PPP register does not hear from a PDSN on behalf of a mobile station within a predetermined amount of time, the expiration timer expires and the PPP register removes the stored PPP context for the mobile station from its database. Thus, as clearly explained in Bertrand, it is the PPP register, and not a wireless communication device (which, at best, would correspond to mobile station 102 of Bertrand) that maintains a timer (and its corresponding connection table).

To support the position that Bertrand discloses a timer wherein the processor removes a connection from the connection table in response to an expiration of the timer, the Examiner cites col. 5, lines 50 – 67 of Bertrand, which recites that the PPP register could be located anywhere in system 100. The Examiner thus concludes that the combination of Madour I and Bertrand disclose "the existence of a timer in a wireless communication device." However, even if the PPP registers of Bertrand, which maintain timers related to the connection between the

radio network and the PDSN, could be located in a wireless communication device, the combination of Madour I and Bertrand still fail to disclose or suggest a first inactivity timer associated with the connection identifier, wherein the processor removes the connection identifier from the connection table in response to an expiration of the first inactivity timer, the first inactivity timer configured to expire before a second inactivity timer maintained in a PDSN to which the wireless communication device is connected via the PCF and which is also associated with the connection identifier. Thus, the combination of Bertrand and Madour I fails to disclose or suggest each and every element of the pending claims.

Moreover, the Examiner asserts that it would "have been obvious to one of the ordinary skill in the art to combine the teaching of Bertrand with the system of Madour for the benefit of achieving a system that reduces radio resource by preventing the creation and renegotiation of PPP session whenever mobile station moves different PDSN." The Examiner cites column 3, lines 20 – 30 of Bertrand for providing this alleged motivation. However, this passage (and Bertrand in general) are directed to inter-PDSN handovers and re-negotiating a PPP connection when moving from one PDSN to another. In contrast, Madour I is concerned with intra-PDSN transfers between PCFs, wherein a PPP connection is maintained even if the connection from the PCF to the PDSN is dormant (see, e.g., Figure 1). Thus, the issue of renegotiating a PPP session is not relevant and would not have motivated one of ordinary skill in the art to combine these references.

Independent Claims 7, 23, and 29

Independent claim 7 recites, among other things, a Packet Data Serving Node (PDSN) comprising a connection table for storing a plurality of connection sets, each connection set comprising one or more connections associated with a wireless communication device, wherein a first timer in the PDSN and a second timer associated with the wireless communication device correspond to each of the connections and wherein the first timer is set to expire after the second timer, and a buffer for receiving data from the network that is designated for delivery to a wireless communication device, storing the received data until the wireless communication device is located, based on an active connection, on one of the connections in the connection set. Independent claims 23 and 29 include similar features. Neither Bertrand nor Madour II, alone or in combination with each other, disclose at least this combination of features.

It s noted that in the Advisory Action, the Examiner argues that Madour I discloses a

wireless communication device having a timer and that Madour II discloses a PDSN having a timer (see page 3 of Advisory Action). However, the rejection of claims 7, 23, and 29 are based on Bertrand in view of Madour II, not Madour I in view of Madour II. Nonetheless, Madour I fails to disclose a timer in wireless communication device for at least the same reasons described above in reference to claim 1.

As explained in the previous response, the claim recites a first timer in the PDSN and a second timer associated with the wireless device (handset). The Examiner admits that Bertrand does not disclose "a first timer in the PDSN and a second timer in the wireless communication device" corresponding to each of the connections wherein the first timer is set to expire after the second timer, and relies on Madour II to overcome this deficiency. As clearly depicted in Figure 2, a cache timer 49 is depicted within PCF 42. Thus, cache timer 49 cannot correspond to the first timer nor the second timer recited in the pending claims because, as recited in the claims, the first timer is in the PDSN and the second timer is in the wireless communication device. Cache timer 49 is clearly included in the PCF, which is distinct from mobile subscribers (11, 12, and 13) and PDSNs (18, 19, and 20) of Madour II. None of the other Figures depict any additional timers. However, Madour II does make mention of an R-P timer. Madour II recites, in column 4, lines 43 – 48, that after "initial PDSN selection and the handoff, a cache memory in the original PCF retains the IP address of the PDSN as well as the Mobile Station Identification (MSID) of the MN for a predetermined time period following timeout of the PPP session (i.e., following expiration of the R-P timer)." Madour II does not explicitly indicate which element maintains the R-P timer. Nonetheless, even if it was located in either a mobile station or a PDSN, Madour II would still fail to disclose both a first timer and a second timer located in a PDSN and a wireless terminal, respectively. It is unclear how the Examiner has interpreted Madour II as describing a first timer in the PDSN and a second timer in a wireless communication device, as no such description appears to be provided in any portion of Madour II. If the Examiner insists on maintaining this rejection, Applicants respectfully request that the Examiner explicitly explain what is being considered a first timer in the PDSN and a second timer in the wireless communication device so that the Applicants can prepare a proper response.

In the Advisory Action, the Examiner argues that "Madour II is also understood to teach a timer in the PCF (see col. 6, lines 27 – 50; whereby the PCF is being associated with the "PDSN" in the claims)." Applicants respectfully submit that the PCF of Madour II is not

equivalent the PDSN in the claims. It is noted that the claims recite both a PCF and a PDSN. Moreover, Madour II also describes two separate entities: a PCF and a PDSN (see, e.g., Figure 2). It is the PCF, and not the PDSN, which stores a cache timer 49. Thus, it is unclear how the Examiner has come to the conclusion that the PCF of Madour II, rather than its PDSN, can be considered equivalent to the PDSN recited in the claims.

Moreover, neither Bertrand nor Madour II, alone or in combination with each other discloses a buffer for receiving data from the network that is designated for delivery to a wireless communication device, storing the received data until the wireless communication device is located, based on an active connection, on one of the connections in the connection set. As such, the combination of Bertrand and Madour II fails to disclose or suggest each and every feature of claim 7, and also fails to disclose the features of claims 23 and 29, which include similar recitations.

<u>Dependent Claims</u>

Claims 5, 6, 9 – 15, 22, and 25 depend from one of the independent claims. As such, these claims are also patentable over the cited references at least by virtue of their dependence, as well as the additional features each claim recites.

For example, claim 5 recites "wherein the processor clears the connection table when a connection is received corresponding to a Packet Data Serving Node (PDSN) that is different from a PDSN corresponding to a previously stored connection." Claim 6 recites "wherein the processor clears the connection table when a clear table message is received by the receiver." Claim 22 recites "receiving a clear table message; and clearing the connection table in response to the clear table message." The Examiner cites paragraphs 32, 34, and 37 of Madour I as allegedly disclosing these features. However, no portion of Madour I discloses receiving a connection corresponding to a different PDSN. Rather, <u>Madour I is concerned with intra-PDSN transfers</u>. Moreover, there is no disclosure or suggestion of clearing a connection table upon receipt of a clear table message. At best, Madour I discloses removing an older PZID previously stored in a list of PZIDs to make room for a new entry using a first in first out procedures. This is clearly different than clearing the list of PZIDs.

The cited references also fail to disclose each and every feature of the remaining independent claims.

Therefore, based on the foregoing, Applicants respectfully request that the Examiner

withdraw the rejection of claims , 5 – 7, 9 – 15, 20, 22, 23, 25, 28, and 29 under 35 USC § 103(a).
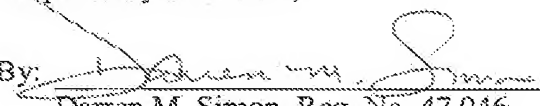
CONCLUSION

In light of these remarks, Applicants submit that the application is in condition for allowance, for which early action is requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

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